

## Reptiles and Amphibians Part 2 (Video Transcript)

*[Video opens with music and a montage of various reptiles and amphibians]*

**Susan:** Did you notice how active these guys have gotten in my hands? That's probably because my hands are really warm. And there is something about reptiles and amphibians that's much different from us. Does anyone know what its called when they are dependant on the outside temperature?

**Woody:** They are cold blooded.

**Narrator:** Both reptiles and amphibians are cold blooded, or ectothermic, meaning their bodies don't generate a lot of heat so they must move between sun and shade to regulate their body temperature. Mammals and birds are warm blooded, or endothermic, meaning their bodies generate heat and maintain a constant body temperature. Since reptiles and amphibians are dependent upon their external environment to regulate their temperature, they become inactive when outside temperatures fall. Warm late winter days will increase the activity levels of both reptiles and amphibians. This is why we hear spring peepers in February and may even see a snake on a warm winter day.

**Man 1:** January Cottonmouth.

**Narrator:** Amphibians are unique because their bodies undergo metamorphosis – a Greek word meaning “to change in form.” The change begins when the eggs hatch into tadpoles with gills, a tail for swimming, and a small mouth designed to feed on algae and plants. This tadpole stage underwater could last just a few weeks or up to two years depending on the species. As the tadpole grows, its body undergoes major changes – hind legs appear, then front legs. The mouth widens the lungs develop and the tail is absorbed as the tadpole becomes a frog or a toad. Reptiles differ from amphibians in that they don't go through a metamorphosis phase as the amphibians do. Scales, claws, and shells are what give reptiles their unique look and make them noticeably different than amphibians.

**Susan:** This is a Broad-head skink, a female Broad-head skink.

**Narrator:** Broad-head and Five-line skinks are commonly seen in wooded areas and even in the backyard. They like to feed on insects and spiders.

**Susan:** This is a wood turtle. Wood turtles are rare and a state threatened species found mostly in the northern and north western Virginia. They are kind of neat in that they spend most of the winter and some of the fall and spring in streams and they tend to come out more on land in the spring and summer.

**Narrator:** The Department of Game and Inland Fisheries has several studies underway to learn more about the home range and life history of turtles.

**Man 2:** The one on my right is a wood turtle and the one on my left is a box turtle. Both of these turtles can be found up on land and sometimes even along the margin of the water and in the water. The two big differences between these turtles is that the box turtle has a highly domed shell and you will find it in varying color from black with yellow to orange mottling. It also has a bottom shell or a plastron that is hinged. It is unique and only a few species has this hinged plastron. And this enables that turtle to completely enclose itself within its shell. And this is a very good way to keep predators from getting in there and try to make a meal of him. The other species, the Wood turtle, is brown with yellow flecks of modeling also orange. It has bright orange feet and its skin. The difference is its somewhat flattened although it does have the sculptured pyramid like scutes. This turtle cannot close its bottom shell to keep away from predators. What it does is uses its large front feet which are heavily scaled and pushes those inside the shell and protects the head from being in contact with a raccoon or opossum or skunk that would try to make a mean of him.

**Narrator:** Box turtles are becoming less common in Virginia due to lose of habitat. Many become casualties on our roadways as they travel to find mates and to lay eggs. Many people like to give turtles a helping hand by moving them across the road. If you do move on, always move it in the direction it was heading. Moving it back where it came from will only endanger it again as it continues to try to cross.

**Susan:** We are on our last group of reptiles. Does everybody know what that is?

**Den 4:** Snakes!

**Susan:** Is anybody afraid of snakes? *[Laughs]* Just a couple people in the back. Well I promise that I don't have anything dangerous and I would like to assure everybody that all snakes in the wild, especially in Virginia, are nothing to fear even the venomous snakes. A bite is a very, very, very last resort.

**Narrator:** Snakes are perhaps the most misunderstood animals in Virginia. While many people fear them, the truth is snakes are beneficial creatures, as they feed on rodents like rats and mice that can harbor disease and destroy property.

**Susan:** This one is called an Eastern King snake. Does anybody know why they might call it a King snake?

**Clay:** It's big?

**Susan:** It's a big one, they do get pretty big. There is a different reason why they call it a King snake, there is something they like to eat that makes them the King.

**Woody:** Other snakes?

**Susan:** Yeah, all other snakes basically. They eat all other snakes. They'll even eat venomous snakes. They'll eat Copperheads, Rattlesnakes, and Cottonmouths. They somehow are immune to the venoms so if they are bitten they are okay. Like Black Rat snakes they will actually coil around their prey and squeeze until it can't breathe so they can handle it and swallow it whole. So if we could open our mouths as big as they could, with that type of stretching of tendons and everything, we could open our mouths as big as our hips and down to our bellies and be able to maybe swallow something like a watermelon whole. *[Laughs]* So that is how they are able to swallow things whole. They also have, the non-venomous snakes and even the venomous snakes have these teeth as well, a little row of teeth on the bottom and the top and the teeth are curved back like thorns. So that helps when they catch something and are trying to swallow it down, that helps push it back into their throat and down the rest of their system.

*[With a hissing snake]*

This is all a big bluff.

*[Fades to black]*